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NOTICE OF ALLOWANCE AND FEE(S) DUE

Waters Technologies Corporation
34 MAPLE STREET - LG
MILFORD, MA 01757

EXAMINER
PREGLER, SHARON

ART UNIT PAPER NUMBER

1772

DATE MAILED: 01/11/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,114	08/24/2007	Geoff C. Gerhardt	W-327	1786

TITLE OF INVENTION: SAMPLE INJECTOR SYSTEM FOR LIQUID CHROMATOGRAPHY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1740	\$300	\$0	\$2040	04/11/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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Waters Techno 34 MAPLE STR MILFORD, MA	logies Corporatio EET - LG	/2012 n	I her State addr trans	Certify that this s Postal Service wit essed to the Mail Smitted to the USPTC	ficate of Mailing or Trans Fee(s) Transmittal is being h sufficient postage for fir Stop ISSUE FEE address O (571) 273-2885, on the de	emission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.	
						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	Α	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/586,114	08/24/2007	•	Geoff C. Gerhardt	•	W-327	1786	
		SYSTEM FOR LIQUID					
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE I			
nonprovisional	NO	\$1740	\$300	\$0	\$2040	04/11/2012	
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
PREGLER,	SHARON	1772	422-070000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Unl	ess an assignee is ident h in 37 CFR 3.11. Comp	"Indication form ed. Use of a Customer A TO BE PRINTED ON Tified below, no assignee	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be particular to the particul	ely, firm (having as a megent) and the names neys or agents. If no rrinted. e) tent. If an assignee ssignment.	nember a 2of up to o name is 3 is identified below, the d	ocument has been filed for	
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent): \Box	Individual 🖵 Corp	poration or other private gr	oup entity Government	
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			 Payment of Fee(s): (Please A check is enclosed. Payment by credit card The Director is hereby overpayment, to Depose 	I. Form PTO-2038 is	s attached.		
a. Applicant claims	tus (from status indicates s SMALL ENTITY state	us. See 37 CFR 1.27.	☐ b. Applicant is no long	er claiming SMALL	ENTITY status. See 37 C	·	
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	e applicant; a registo	ered attorney or agent; or the	ne assignee or other party in	
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This collection of informan application. Confident submitting the completed his form and/or suggesti	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this bu	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	on is required to obtain or re 1.14. This collection is esti depending upon the indivi- e Chief Information Office	etain a benefit by the mated to take 12 mi dual case. Any com . U.S. Patent and Tr	public which is to file (an nutes to complete, includir ments on the amount of ti- ademark Office, U.S. Dep	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O.	

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43840 75	90 01/11/2012		EXAMINER		
Waters Technologies Corporation			PREGLER, SHARON		
34 MAPLE STREE MILFORD, MA 01			ART UNIT	PAPER NUMBER	
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DATE MAILED: 01/11/2012

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 374 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 374 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	10/586,114	GERHARDT ET AL.	
Notice of Allowability	Examiner	Art Unit	
	SHARON PREGLER	1779	
	SHARON PREGLER	1772	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in or other appropriate commu IGHTS. This application is s	this application. If not included nication will be mailed in due course. TH	I S iative
1. \boxtimes This communication is responsive to <u>RCE/IDS filed 12/13/1</u>	<u>1</u> .		
 An election was made by the applicant in response to a rest requirement and election have been incorporated into this 		during the interview on; the restric	tion
3. X The allowed claim(s) is/are 1-9,11-20,22-23,27-30,33-61.			
4. ☑ Acknowledgment is made of a claim for foreign priority under a) ☑ All b) ☐ Some* c) ☐ None of the:		f).	
1. Certified copies of the priority documents have		•	
2. Certified copies of the priority documents have	• •		
3. Copies of the certified copies of the priority do	cuments have been received	I in this national stage application from th	е
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements	
5. A SUBSTITUTE OATH OR DECLARATION must be submir INFORMAL PATENT APPLICATION (PTO-152) which give			
6. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) ☐ including changes required by the Notice of Draftspers		(PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
 DEPOSIT OF and/or INFORMATION about the deposit of E attached Examiner's comment regarding REQUIREMENT FO 			
Attachment(s)	5 		
1. Notice of References Cited (PTO-892)		ormal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		ımmary (PTO-413), Mail Date	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date		Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's	Statement of Reasons for Allowance	
of Biological Material	9. 🗌 Other		
/Sharon Pregler/ Examiner, Art Unit 1772			
January 4, 2012			

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Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 12/14/2011 has been entered.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 12/14/2011 was filed after the mailing date of the notice of allowance on 9/15/2011. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

The references cited in the IDS do not affect patentability of the claimed subject matter.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Shibamoto teaches in Figure 1 a **high pressure gas** chromatograph system comprising a main body 23 (claimed housing with chamber), a sample injection port 11 (claimed first inlet opening) which receives a needle (first inlet conduit means) with a sample injected (sample supply) into the chamber of the main body (column 3 lines 60-63), an exit column 12 (first exit conduit means) within an opening at the bottom of body 23 (first exit opening), a split flow line 28 (second exit opening) for discharging, and carrier gas line 26 (second inlet opening) for receiving fluid, and control unit 14 that controls the flow rate control valves 32 & 34, which are respectively in the carrier flow line 26 (second inlet opening) and split flow line 28, (second exit opening).

Gilson teaches in Figures 1-2 a chamber 12 where multiple inlets and outlets are received by conduits: inlet liquid supply conduit 24 (inlet conduit means) received by

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inlet 22 (inlet opening), and liquid delivery conduit 16 (outlet conduit means) received by outlet 28 (outlet opening) (*Gilson column 2 lines 5-30*), vent conduit 60 (outlet conduit means) received by vent opening 56 (outlet opening), pressurized air conduit 58 (inlet conduit means) received by air opening 54 (inlet opening) (*column 3 lines 25-45*). Conduits may be any size and length to provide means for supplying the chamber with sample and to provide means for delivering sample from the chamber which would benefit from liquid transport without relying on gravity or siphon effects (*Gilson column 2 lines 70-75*).

Oberhauser teaches in figure 1 a liquid chromatography apparatus with an elongated column with pump means 26 and 36, injectors 22 and 32 to input conduit 25 coupled to column 20 under the control of controller 39 (column 4 lines 25-65) where materials for the conduits are chosen to withstand pressures of up to several thousand psi. When portions of the conduits are placed in apertures, a tight fitting such as screws or O-rings are necessary to hold the conduits in place and prevent fluid leakage (column 6 lines 25-50).

Gerhardt (IDS: 6,557,575) teaches in figure 1 a freeze thaw valve for moving high pressure liquid through narrow channels. The structure of the flow management means in Gerhardt does not comprise a conduit means received by exit openings and a liquid-tight fitting disposed between an opening and its associated conduit means wherein the fitting means retain the conduit means at pressures. Thus Gerhardt '575 does not cure the deficiencies of Shibamoto, Gilson, and Oberhauser.

The aforementioned references do not teach or suggest a <u>high pressure liquid</u> chromatography structure comprising two exit conduit means each received by exit openings, two inlet conduit means each received by inlet openings, and a liquid-tight fittings disposed between an opening and its associated conduit means wherein the fitting means retain the conduit means at pressures between 15,000 psi and 120,000 psi. It would not have been obvious to one of ordinary skill in the art to modify the structural teachings of Shibamoto, Gilson, and Oberhauser for a high pressure liquid chromatograph of at least 15,000 psi because such a modification would render the system inoperable for its intended use.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHARON PREGLER whose telephone number is (571)270-5051. The examiner can normally be reached on Mon - Fri 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, In Suk Bullock can be reached on (571)272-5954. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sharon Pregler/ Examiner, Art Unit 1772

/In Suk Bullock/ Supervisory Patent Examiner, Art Unit 1772